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| APPLICATION NO.             | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.   |  |
|-----------------------------|---------------|----------------------|---------------------|--------------------|--|
| 10/010,875                  | 11/12/2001    | Masatake Ohmori      | 2271/65635-A        | 4086               |  |
| 75                          | 90 11/02/2005 |                      | EXAM                | INER               |  |
| RICHARD F. JAWORSKI         |               |                      | BRINICH, S'         | BRINICH, STEPHEN M |  |
| Cooper & Dunh               | nam LLP       |                      |                     |                    |  |
| 1185 Avenue of the Americas |               |                      | ART UNIT            | PAPER NUMBER       |  |
| New York, NY 10036          |               |                      | 2624                |                    |  |
|                             | •             |                      |                     |                    |  |

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)                   |  |  |  |  |
|--|---|--------------------------------|--|--|--|--|
| Office Action Cummans  | 10/010,875  | OHMORI, MASATAKE               |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit                       |  |  |  |  |
|  | Stephen M. Brinich  | 2624                           |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |                                |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                |  |  |  |  |
| Status   |   |                                |  |  |  |  |
| 1) Responsive to communication(s) filed on   |   | •                              |  |  |  |  |
|  | action is non-final.  |                                |  |  |  |  |
| •  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                                |  |  |  |  |
| <i>,</i> —   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |                                |  |  |  |  |
| Disposition of Claims  |   |                                |  |  |  |  |
| 4)⊠ Claim(s) <u>1-57</u> is/are pending in the application.  |   |                                |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |                                |  |  |  |  |
| 5)⊠ Claim(s) <u>3-12,17-26 and 30-57</u> is/are allowed.   |   |                                |  |  |  |  |
| 6)⊠ Claim(s) <u>1,2,13,15,16 and 27</u> is/are rejected.   |   |                                |  |  |  |  |
| 7) Claim(s) 14,28 and 29 is/are objected to.   |   |                                |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  |   |                                |  |  |  |  |
| Application Papers   |   |                                |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |                                |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce  |   | xaminer.                       |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                                |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                                |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                                |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                                |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |                                |  |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:  |   |                                |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |                                |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                                |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                                |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |                                |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                                |  |  |  |  |
|  |   |                                |  |  |  |  |
|  |   |                                |  |  |  |  |
| Attachment(s)  |   |                                |  |  |  |  |
| Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |                                |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da 5) Notice of Informal Pa  | te atent Application (PTO-152) |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  | 6) Other:   | aton Application (FTO-132)     |  |  |  |  |

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### DETAILED ACTION

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1-2 & 15-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's described Prior Art.

Re claims 1 & 15, Applicant's described Prior Art (page 2, line 5 - page 4, line 19; Figures 1A-1B) describes a system for reducing the size of a binary image in a sub-scanning direction using a conditional OR process, so as to thin out a line immediately after the thinning point.

The recitation of "limiting a size-change point... to an oddnumber line or an even-number line" as written does not appear to restrict the scope of the claim, inasmuch as any point is necessarily on either an odd-number line or an even-number line.

#### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 13 & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's described Prior Art.

Re claim 13 & 27, Applicant's described Prior Art describes pixel reduction in one direction, rather than in both horizontal and vertical directions.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the described Prior Art arrangement to reduce in image in both directions (one necessarily following the other; the two possible orders being a matter of choice among equivalents obvious to one of ordinary skill in the art if the specific selection was not to solve a known problem in the art, per *In re Ruff* (118 USPQ 343)).

The suggestion/motivation for doing so would have been to produce an image reduced in both directions, thus allowing the final image to retain the same shape as the original by equal reduction both horizontally and vertically.

Therefore, it would have been obvious to apply Applicant's described Prior Art to reduce the image in a scanning direction,

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then in a sub-scanning direction, to obtain the invention as specified in claims 13 & 27.

#### Allowable Subject Matter

- 5. Claims 3-12, 17-26, & 30-57 are allowed.
- 6. Claims 14, & 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 3, 8, 17, 22, 32, & 51 (and dependent claims 4-7, 9-12, 18-21, 23-26, 33-36, & 52-55), the art of record does not teach or suggest the recited selective processing depending on whether an odd-numbered or even-numbered line is being processed in conjunction with the recited arrangement for binary image reduction.

Re claims 30, 37, 44, & 46 (and dependent claims 31, 38-43, 45, & 47-50, & 56-57), the art of record does not teach or suggest the recited line memory arrangements in conjunction with the recited arrangement for binary image reduction.

Re claims 14 & 28, the art of record does not teach or suggest the recited selective use of simple thinning out followed by conditional OR processing when reduction is 50

percent or below in conjunction with the recited arrangement for binary image reduction.

Re claim 29, the art of record does not teach or suggest the recited selective discard of data from a line memory when a current process line is other than the size-change point in conjunction with the recited arrangement for binary image reduction.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyata discloses (Abstract) an example of conditional OR image processing.

9. Any inquiry concerning the contents of this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 571-272-7430.

Any inquiry relating to the status of this application or proceeding or any inquiry of a general nature concerning application processing should be directed to the Tech Center 2600 Customer Service center at 571-272-2600 or to the USPTO Contact Center at 800-786-9199 or 703-308-4357.

The examiner can normally be reached on weekdays 7:00-4:30, alternate Fridays off.

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If attempts to contact the examiner and the Customer

Service Center are unsuccessful, supervisor David Moore can be

contacted at 571-272-7437.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 571-273-8300 (as of July 15, 2005).

Hand-carried correspondence may be delivered to the Customer Service Window, located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Stephen M Brinich

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Examiner

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smb

October 28, 2005